

### **REMARKS**

The Office Action of June 29, 2006 has been reviewed and the comments therein were carefully considered. Claims 1-18 are currently pending. Claims 1-18 stand rejected.

Independent claim 1 was objected to in the Office Action for an informality. Claim 1 has been amended in accordance with the Examiner's suggestion to delete the phrase "In a medical system having a plurality of monitoring elements." Applicants respectfully submit that the objection to claim 1 has now been rendered moot.

Applicants hereby withdraw the claim for foreign priority to PCT Application No. PCT/US03/32938, filed October 15, 2003 – the same day as the present U.S. application. Thus, there is no longer a need to file a certified copy of the PCT application.

#### **Claim Rejection Under 35 USC §102**

Claims 1-18 were rejected under 35 USC §102(e) as being anticipated by Gallant, et al., U.S. Patent No. 6,730,038 ("Gallant"). Gallant teaches the use of a heart rate signal provided by an ECG or other external device as synchronization signal to aid in identifying artifacts or other features in a tonometrically obtained pressure waveform. Gallant teaches that since ECG (or other non-indigenous measurement technique used may not be subject to non-physiologic noise, (e.g., movement by the patient, vibration of the treatment facility, low-frequency AC noise, etc.), artifacts present in the pressure waveform can be mapped against the external signal for purposes of correlating and eliminating such artifacts. Gallant, col. 15, lines 36-46.

Claim 1 claims the step of "(c) detecting whether the first neurological signal has poor signal quality by determining that an amount of the data points exhibiting poor signal quality within the moving time window has exceeded a predetermined threshold." Nowhere does Gallant teach this step. Rather, Gallant teaches mapping tonometric waveform signals against a non-indigenous measurement (such as ECG) to determine whether certain tonometric waveform signals include spurious noise transient or motion artifact that warrants discarding of the observed pressure transient from the data collected for a time period. Gallant, col. 15, lines 46-67. Because Gallant does not teach step (c) of claim 1, claim 1 is patentable over Gallant.

Claim 1 is also patentable over Gallant for another reason. Gallant does not teach step (e) of claim 1. No where does Gallant teach that "if the first neurological signal does not have poor signal quality, performing (i) sampling of the first and second neurological signals at different times instances resulting in a time shift between the first and second neurological signal samples; and (ii) time shifting signal samples of the second neurological signal to correct for the time shift so the second neurological signal is synchronized with the first neurological signal." No where do the words "time shift" appear in Gallant.

Claims 2-18 all include a feature similar to the feature discussed above with respect to independent claim 1. Therefore, for at least the same reasons discussed above, claims 2-18 are patentable over Gallant. Accordingly, withdrawal of this ground of rejection is respectfully requested.

The Conclusion section of the Office Action states that U.S. Patent No. 5,813,993 ("Kaplan") teaches the subject matter of the Applicants' claims. However, the Office Action does not point to any specific portion(s) of Kaplan in support of this statement. Nor did the Office Action reject the any of the claims based on Kaplan. Kaplan has been reviewed. It is not seen where Kaplan teaches at least steps (c) and (e) set forth in independent claim 1. Note: The foregoing sentence is not an admission that Kaplan teaches any of the other steps set forth in claim 1, or any of the dependent claims 2-18. It is respectfully submitted that claims 1-18 are patentable over Kaplan.


### **CONCLUSION**

All rejections and objections having been addressed, Applicants therefore respectfully request reconsideration of the pending claims and a finding of their allowability. A notice to this effect is respectfully requested. Please feel free to contact the undersigned should any questions arise with respect to this case that may be addressed by telephone.

Appln. No. 10/687,557  
Amendment dated September 27, 2006  
Reply to Office Action of June 29, 2006

PATENT

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